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February 1972

(A) 10 JUNE 1964 (B) 15

REVISED

APPROVED 19 SEPT 1963

| ├ — А — • | B - |
|-----------------------|-------|
| | H |
| | |
| | D |
| G DIA (SEE NOTE 6) | E-E |

| Ltr | Dimensions in inches with metric equivalents (mm) in parentheses | | | | | |
|-----|--|----------------|--|--|--|--|
| | Minimum | Maximum | | | | |
| A | .694 (17.63) | . 756 (19. 20) | | | | |
| В | . 204 (5. 18) | . 266 (6. 76) | | | | |
| C | .189 (4.80) | . 251 (6. 38) | | | | |
| D | .250 (6.35) | . 374 (9.50) | | | | |
| E | .051 (1.30) | . 071 (1.80) | | | | |
| F | . 590 (14. 99) | . 610 (15. 49) | | | | |
| G | . 023 (. 58) | . 027 (. 69) | | | | |

| RATINGS | |
|---------------------------------------|----------------------|
| Style | LT4 |
| Grade | 1 |
| Class | В |
| Temperature rise | 35°C |
| Ambient temperature | 90° C |
| Operating temperature | -55° to +125°C |
| Dielectric withstanding | 1000 volts rms for a |
| Voltage (sea level) | minimum of 60 sec. |
| Dielectric withstanding | 200 volts rms for a |
| Voltage (reduced barometric pressure) | minimum of 60 sec. |
| Terminal pull | 5 pounds |
| Altitude | 70, 000 feet |
| Weight | 1.5 grams max. |

THIS MILITARY STANDARD INACTIVE FOR NEW DESIGN AFTER 25 July 1983 NO SUPERSEDING STANDARD

ELECTRICAL CHARACTERISTICS (INITIAL)

| Dash No. <u>1</u> / <u>2</u> / | Type designation | Former type designation | Superseded MS part no. | | Q min | Test freq. | Self-resonant frequency Min | DC resistance Max | Rated DC current |
|--------------------------------------|---------------------|-------------------------------|---------------------------|-----------|----------|---------------|-----------------------------------|-------------------------|------------------------|
| | | | MS16226 | υh | | MHz | MHz | Ohms | Ma |
| -1 | LT4K200 | LT7K145 | -1 | 0.47 ±20% | 50 | 25 | 250 | .06 | 1800 |
| -2 | LT4K201 | LT7K146 | -2 | 0.68 ±20% | 50 | 25 | 215 | .10 | 1400 |
| _3 | LT4K202 | LT7K147 | -3 | 1.00 ±10% | 50 | 25 | 180 | .15 | 1150 |
| -4 | LT4K203 | LT7K148 | -4 | 1.50 ±10% | 40 | 7.9 | 145 | .28 | 850 |
| -5 | LT4K204 | LT7K149 | -5 | 2.20 ±10% | 40 | 7.9 | 120 | .50 | 625 |
| -6 | LT4K205 | LT7K150 | -6 | 2.70 ±10% | 40 | 7.9 | 108 | .70 | 525 |
| -7 | LT4K206 | LT7K151 | -7 | 3.30 ±10% | 40 | 7.9 | 95 | 1.40 | 370 |
| -8 | LT4K207 | LT7K152 | -8 | 3.90 ±10% | 40 | 7.9 | 90 | 1.50 | 3 50 |
| -9 | LT4K208 | LT7K153 | -9 | 4.70 ±10% | 40 | 7.9 | 80 | 1.80 | 325 |

1/ The dash number added to the MS military-standard number constitutes the MS part number; for example MS18100-1.
2/ See note 11. DENOTES CHANGE

| P.A. NAVY-EC | International interest | TITLE Coils, radio frequency, molded, fixed, subminiature (phenolic core) | MILITARY STANDARD | |
|---------------------------------|------------------------|---|-------------------|--|
| Other Cust AF-85 ARMY-ER | | types LT4K200 to LT4K208 incl. LT4K220 and LT4K221 | MS 18100 | |
| Procurement Specifica MIL-C-153 | | SUPERSEDES: 2/ MS16226(SHIPS) in part | PAGE 1 OF 3 | |

(D)

FOR CHANGES SEE PAGES 1, 2 AND 3(D) For chgs see pgs 183

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| - | A B | 1 |
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| | | <u>t</u> |
| | | 4 |
| | | 1 |
| G DIA (SEE NOTE 6) | F — E | |

| Ltr | Dimensions in inches with metric equivalents (mm) in parentheses | | | | | | |
|-----|--|---------|----------------|--|--|--|--|
| | Miı | nimum | Maximum | | | | |
| A | . 594 | (15.09) | . 656 (16. 99) | | | | |
| В | . 251 | (6.38) | . 313 (7.95) | | | | |
| С | . 234 | (5.94) | . 296 (7. 52) | | | | |
| D | . 250 | (6.35 | . 374 (9.50) | | | | |
| E | . 051 | (1.30) | . 071 (1.80) | | | | |
| F | . 490 | (12.50) | . 510 (12. 95) | | | | |
| G | .023 | (.58) | . 027 (. 69) | | | | |

| RATINGS | |
|-----------------------------|----------------------|
| Style | LT4 |
| Grade | 1 |
| Class | В |
| Temperature rise | 35°C |
| Ambient temperature | 90° C |
| Operating temperature | -55° to +125°C |
| Dielectric withstanding | 1000 volts rms for a |
| Voltage (sea level) | minimum of 60 sec. |
| Dielectric withstanding | 200 volts rms for a |
| Voltage (reduced barometric | minimum of 60 sec. |
| pressure) | |
| Terminal pull | 5 pounds |
| Altitude | 70, 000 feet |
| Weight | 1.8 grams max. |

ELECTRICAL CHARACTERISTICS (INITIAL)

| $\begin{bmatrix} \text{Dash} \\ \text{No.} & \underline{1}/\\ \underline{2}/ \end{bmatrix}$ | Type designation | Former type designation | Superseded MS part no. | Inductance ± 10% | Q min | Test freq. | Self-resonant frequency Min | DC resistance Max | Rated DC current |
|---|---------------------|-------------------------------|---------------------------|---------------------|----------|---------------|-----------------------------------|-------------------------|------------------------|
| | | | | uh | | MHz | MHz | Ohms | Ма |
| -21 -22 | LT4K220 LT4K221 | LT7K165 LT7K166 | MS16226-21 MS16226-22 | 47 56 | 15 15 | 2.5 2.5 | 8.5 8.3 | 5.9 6.4 | 200 175 |

1/ The dash number added to the MS military-standard number constitutes the MS part number; for example, MS18100-1.

2/ See note 11.

| P.A NAVY-EC | International interest | TITLE Coils, radio frequency, molded, fixed, subminiature (phenolic core | e) MILITARY STANDARD |
|---------------------------------------|---------------------------|--|----------------------|
| Other Cust AF-85 ARMY-ER | | types LT4K200 to LT4K208 incl; LT4K220 and LT4K221 | MS 18100 |
| Procurement Specification MIL-C-15305 | | SUPERSEDES: MS16226(SHIPS) in part | PAGE 2 OF 3 |

CHANGES

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| | E | lectrical Character | ristics (Final) | | |
|--------------------------------------|-----------------------|------------------------------|--|----------------------|--|
| Inspection Group | | variation from easurement | Allowable % from specified minimum value in Electrical Characteristics (initial) table | | |
| | Inductance Percent | DC resistance | Self-resonant frequency | Q | |
| Qualification Inspection | | | | | |
| Group II | ± 2 | | | - 10 | |
| Group III | ± 5 | ± (3%+.001ohm) | - 8 | - 10 - 10 - 15 | |
| Group IV | ± 5 | ± (2%+ . 001ohm) | - 10 | - 15 | |
| Quality Conformance Inspection | | | | | |
| Group C Subgroup I | ± 2 | | | - 10 | |
| Subgroup II | ± 5 | +(2%+.001ohm) | - 10 | - 15 | |
| Subgroup III | ± 5 | ± (3%+.001ohm) | - 8 | - 10 | |

NOTES:

- 1. Dimensions are in inches.
- 2. Metric equivalents are given for general information only and are based upon 1 inch = 25.4 mm.
- 3. These coils are intended to be mounted by the body.
- 4. The polarizing voltage during the moisture-resistance tests is applied with the positive lead connected to the coil terminals tied together, and the negative lead connected to the metal strap.
- Terminal strength (Pull) test, is not applicable in "Group B" inspection Table VI.
- 6. Solderable/weldable lead wire, AWG #22.
- 7. Barometric pressure test (test condition C) is applicable.
- 8. Shock, specified pulse, method 213, test condition I, is applicable.
- 9. Referenced document shall be the issue in effect on date of invitation for bid.
- This standard takes precedence over the procurement specification referenced herein.
- 11. The former MS part numbers MS18100-10 thru MS18100-20 and MS18100-23 thru MS18100-42 have been superseded as follows:
 - MS18100-10 thru MS18100-20 by MS14040-1 thru MS14040-11, respectively, MS18100-23 thru MS18100-27 by MS14041-1 thru MS14041-5, respectively,
 - MS18100-28 thru MS18100-32 by MS14042-1 thru MS14042-5, respectively, MS18100-33 thru MS18100-37 by MS14043-1 thru MS14043-5, respectively,
- MS18100-35 thru MS18100-37 by MS14043-1 thru MS14043-5, respectively, MS18100-38 thru MS18100-42 by MS14044-1 thru MS14044-5, respectively,
- 12. Quality Asssurance Provisions:
 - Qualification Inspection: Not applicable for this standard.
 - Quality Conformance Inspection: Group A and B tests of MIL-C-15305 shall be applicable.

| P.A. NAVY-EC | International i nterest | TITLE Coils, radio frequency, molded, fixed, subminiature (phenolic core) | MILITARY STANDARD | |
|---------------------------------------|----------------------------|---|-------------------|--|
| Other Cust AF-85 ARMY-ER | | types LT4K200 to LT4K208 incl. LT4K220 and LT4K221 | MS 18100 | |
| Procurement Specification MIL-C-15305 | | supersedes: MS16226(SHIPS) in part | PAGE 3 of 3 | |